

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/005886

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C10M169/04// (C10M169/04, 105:04, 137:02, 137:10, 159:24)
 C10N20:00, 20:02, 30:00, 30:06, 40:04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C10M169/04, 105/04, 137/02-137/10, 159/24, C10N20:00-20:02,
 30:00, 30:06, 40:04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2005
Kokai Jitsuyo Shinan Koho	1971-2005	Toroku Jitsuyo Shinan Koho	1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2003-514100 A (THE LUBRIZOL CORP.), 15 April, 2003 (15.04.03), & AU 200077274 A & EP 1246896 A2 & US 6372696 B1 & WO 01/34738 A2	1-7, 10 8-9
X	JP 10-25489 A (Cosmo Research Institute et al.), 27 January, 1998 (27.01.98), (Family: none)	1-7, 10 8-9
X	JP 11-349969 A (Nippon Mitsubishi Oil Corp.), 21 December, 1999 (21.12.99), & EP 949319 A2 & JP 11-293265 A & JP 11-349968 A & JP 11-349971 A & JP 11-349972 A & US 6242393 B1	1-7, 10 8-9

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

23 June, 2005 (23.06.05)

Date of mailing of the international search report

12 July, 2005 (12.07.05)

Name and mailing address of the ISA/
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PCT/JP2005/005886

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 2001-354988 A (Nippon Mitsubishi Oil Corp.), 25 December, 2001 (25.12.01), (Family: none)	1-7, 10 8-9
X Y	JP 2002-194371 A (Sanyo Chemical Industries, Ltd. et al.), 10 July, 2002 (10.07.02), (Family: none)	1-7, 10 8, 9
X Y	JP 62-53399 A (Idemitsu Kosan Co., Ltd. et al.), 09 March, 1987 (09.03.87), & CA 1267133 A & DE 3687214 T2 & EP 220426 A2 & KR 9000917 B1 & US 4704216 A	1-7, 10 8-9
Y	JP 2003-277785 A (Infinum International Ltd.), 02 October, 2003 (02.10.03), & AU 2003201004 A & CA 2422143 A1 & EP 1344814 A1 & US 2003/0181339 A1	8-9